represented in such appeals by the district or county attorney of the county, or the Attorney General, or any of their assistants."

Sec. 6. If any provisions of this Act, or the application thereof, to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the law which can be given effect without the invalid provisions or applications and to this end the provisions of this law are declared severable.

Sec. 7. The fact that the percentage of increase in crime in recent years has far exceeded the state's increase in population and the need for a state-wide Commissioner to study ways and means of law enforcement officer training create an emergency and an imperative public necessity that the Constitutional Rule that bills be read on three several days in each House be suspended, and said Rule is hereby suspended; and that this Act take effect and be in force from and after its passage, and it is so enacted.

Passed the Senate on March 25, 1969, by a viva voce vote; passed the House on May 8, 1969, by a non-record vote.

Approved May 27, 1969.

Effective Sept. 1, 1969, 90 days after date of adjournment.

PUBLIC BUILDINGS—CONSTRUCTION FOR USE BY PHYSICALLY HANDICAPPED PERSONS

CHAPTER 324 10

S. B. No. 111

An Act to require that those buildings and facilities constructed in the state by the use of federal, state, county, or municipal funds shall adhere to the principles prescribed by this Act in order to make these buildings and facilities accessible to, and useable by, the physically handicapped; and declaring an emergency.

Be it enacted by the Legislature of the State of Texas:

Policy

Section 1. The provisions of this Act are enacted to further the policy of the State of Texas to encourage and promote the rehabilitation of handicapped or disabled citizens. It is the intent of this Act to eliminate, insofar as possible, unnecessary barriers encountered by aged, handicapped or disabled persons, whose ability to engage in gainful occupations or to achieve maximum personal independence is needlessly restricted when such persons cannot readily use public buildings.

Application of act

Sec. 2. (a) The standards and specifications set forth in this Act shall apply to all buildings and facilities used by the public which are constructed in whole or in part by the use of state, county, or municipal funds, or the funds of any political subdivision of the state. To such

10. Vernon's Ann.Civ.St. art. 678g, §§ 1-21.

extent as is not contraindicated by federal law or beyond the state's power of regulation, these standards shall also apply to buildings and facilities constructed in this state through partial or total use of federal funds. All buildings and facilities constructed in this state, or substantially renovated, modified, or altered, after the effective date of this Act from any one of these funds or any combination thereof shall conform to each of the standards and specifications prescribed herein except where the governmental department, agency, or unit concerned shall determine, after taking all circumstances into consideration, that full compliance with any particular standard or specification is impracticable. Where it is determined that full compliance with any particular standard or specification is impractical, the reasons for such determination shall be set forth in written form by those making the determination and forwarded to the State Building Commission. If it is determined that full compliance is not practicable, there shall be substantial compliance with the standard or specification to the maximum extent practical, and the written record of the determination that it is impractical to comply fully with a particular standard or specification shall also set forth the extent to which an attempt will be made to comply substantially with the standard or specification.

(b) These standards and specifications shall be adhered to in those buildings and facilities under construction on the effective date of this Act, unless the authority responsible for the construction shall determine that the construction has reached a state where compliance is impractical. This Act shall apply to temporary or emergency construction as well as permanent buildings.

Scope and purpose

- Sec. 3. (a) This Act is concerned with nonambulatory disabilities, semiambulatory disabilities, sight disabilities, hearing disabilities, disabilities of coordination and aging.
- (b) It is intended to make all buildings and facilities covered by this Act accessible to, and functional for, the physically handicapped to, through, and within their doors, without loss of function, space, or facilities where the general public is concerned.

Definitions

- Sec. 4. For the purpose of this Act the following terms have the meanings as herein set forth:
- (1) "Nonambulatory disabilities" means impairments that, regardless of cause or manifestation, for all practical purposes, confine individuals to wheelchairs.
- (2) "Semiambulatory disabilities" means impairments that cause individuals to walk with difficulty or insecurity. Individuals using braces or crutches, amputees, arthritics, spastics, and those with pulmonary and cardiac ills may be semiambulatory. The listing here made is illustrative and shall not be construed as being exhaustive.
- (3) "Sight disabilities" means total blindness or impairments affecting sight to the extent that the individual functioning in public areas is insecure or exposed to danger.
- (4) "Hearing disabilities" means deafness or hearing handicaps that might make an individual insecure in a public area because he is unable to communicate or hear warning signals.

- (5) "Disabilities of coordination" means faulty coordination or palsy from brain, spinal, or peripheral nerve injury.
- (6) "Aging" means those manifestations of the aging processes that significantly reduce mobility, flexibility, coordination, and perceptiveness but are not accounted for in the aforementioned categories.
- (7) "Standard," when this term appears in small letters, is descriptive and means typical type.
- (8) "Fixed turning radius, wheel to wheel" means the tracking of the caster wheels and large wheels or a wheelchair when pivoting on a spot.
- (9) "Fixed turning radius, front structure to rear structure" means the turning radius of a wheelchair, left front-foot platforms to right rear wheel, or right front-foot platform to left rear wheel when pivoting on a spot.
- (10) "Involved (involvement)" means a portion or portions of the human anatomy or physiology, or both, that have a loss or impairment of normal function as a result of genesis, trauma, disease, inflammation, or degeneration.
- (11) "Ramps, ramps with gradients" means ramps with gradients (or ramps with slopes) that deviate from what would otherwise be considered the normal level. An exterior ramp, as distinguished from a "walk," shall be considered an appendage to a building leading to a level above or below existing ground level. As such, a ramp shall meet certain requirements similar to those imposed upon stairs.
- (12) "Walk, walks" means a predetermined, prepared-surface, exterior pathway leading to or from a building or a facility, or from one exterior area to another, places on the existing ground level and not deviating from the level of the existing ground immediately adjacent.
- (13) "Appropriate number" means the number of a specific item that would be reasonably necessary, in accord with the purpose and function of a building or a facility, to accommodate individuals with specific disabilities in proportion to the anticipated number of individuals with disabilities who would use a particular building or facility.

Design criteria

- Sec. 5. The following design criteria shall be applicable:
- (1) The collapsible-model wheelchair of tubular metal construction with plastic upholstery for back and seat is most commonly used. The standard model of all manufacturers falls within the following limits, which are used as the basis of consideration:
 - (A) Length: 42 inches
 - (B) Width, when open: 25 inches
 - (C) Height of seat from floor: 19-1/2 inches
 - (D) Height of armrest from floor: 29 inches
 - (E) Height of pusher handles (rear) from floor: 36 inches
 - (F) Width, when collapsed: 11 inches
- (2) The fixed turning radius of a standard wheelchair, wheel to wheel, is 18 inches. The fixed turning radius, front structure to rear structure, is 31.5 inches.
- (3) The average turning space required by a person in a wheel-chair (180 to 360 degrees) is 60×60 inches. A turning space of 63×56 inches may at times prove more workable and desirable.
- (4) A minimum width of 60 inches is required for two individuals in wheelchairs to pass each other.

- (5) In a wheelchair the average unilateral vertical reach is 60 inches and ranges from 56 to 78 inches.
- (6) The average horizontal working (table) reach of a person in a wheelchair is 30.8 inches and ranges from 28.5 inches to 33.2 inches.
- (7) The bilateral horizontal reach, both arms extended to each side, shoulder high, of a person in a wheelchair, ranges from 54 inches to 71 inches and averages 64.5 inches.
- (8) An individual reaching diagonally (from a wheelchair) as would be required in using wall-mounted dial telephones or towel dispenser, would make the average reach (on the wall) 48 inches from the floor.
- (9) Most individuals ambulating on braces or crutches, or both, or on canes are able to manipulate within the specifications prescribed for wheelchairs, although doors present quite a problem at times. However, a crutch tip extending laterally from an individual is not obvious to others in heavily trafficked areas, and not as obvious or protective as a wheelchair and is, therefore, a source of vulnerability.
- (10) On the average, individuals 5 feet 6 inches tall require an average of 31 inches between crutch tips in the normally accepted gait.
- (11) On the average, individuals 6 feet 0 inches tall require an average of 32.5 inches between crutch tips in the normally accepted gait.

Site development

- Sec. 6. (a) The ground shall be graded, even contrary to existing topography, so that it attains a level with a normal entrance and will make a facility accessible to individuals with physical disabilities.
- (b) Public walks shall be at least 48 inches wide and shall have a gradient not greater than 5 percent. These walks shall be of continuing common surface, not interrupted by steps or abrupt changes in level. Wherever walks cross other walks, driveways, or parking lots they shall blend to a common level. A walk shall have a level platform at the top which is at least 5 feet by 5 feet if a door swings out onto the platform or toward the walk. This platform shall extend at least one foot beyond each side of the doorway. A walk shall have a level platform at least 3 feet deep and 5 feet wide, if the door does not swing onto the platform or toward the walk. This platform shall extend at least one foot beyond each side of the doorway.
- (c) Spaces in parking lots that are accessible to the building or facility shall be set aside and identified for use by individuals with physical disabilities. An adequate parking space is one that is open on one side and which allows room for individuals in wheelchairs or individuals with braces and crutches to get in and out of an automobile onto a level surface, suitable for wheeling and walking. Parking spaces for individuals with physical disabilities when placed between two conventional diagonal or head-on parking spaces shall be 12 feet wide. Care in planning shall be exercised so that individuals in wheelchairs and individuals using braces and crutches are not compelled to wheel or walk behind parked cars. Consideration shall be given to the distribution of spaces for use by the disabled, in accordance with the frequency and regularity of their parking needs. Walks shall be in conformity with Section 6(b) of this Act.

Ramps

- Sec. 7. (a) Where ramps with gradients are necessary or desired, they shall conform to the following specifications:
- (1) A ramp shall not have a slope greater than one foot rise in 12 feet, or 8.33 percent, or 4 degrees 50 minutes.

- (2) A ramp shall have handrails on at least one side, and preferably two sides, that are 32 inches in height, measured from the surface of the ramp, that are smooth, that extend one foot beyond the top and bottom of the ramp, and that as far as practicable conform with American Standard Safety Code for Floor and Wall Openings, and Toe Boards as promulgated by the American Standards Association, Inc.
- (b) Ramps shall have a surface that is nonslip. A ramp shall have a level platform at the top which is at least 5 feet by 5 feet, if a door swings out onto the platform or toward the ramp. This platform shall extend at least one foot beyond each side of the doorway. A ramp shall have a level platform at least 3 feet deep and 5 feet wide, if the door does not swing onto the platform or toward the ramp. This platform shall extend at least one foot beyond each side of the doorway. Each ramp shall have at least 6 feet of straight clearance at the bottom. Ramps shall have level platforms at 30 foot intervals for purposes of rest and safety and shall have level platforms wherever they turn.

Entrances

Sec. 8. At least one primary entrance to each building shall be useable by individuals in wheelchairs. At least one entrance useable by individuals in wheelchairs shall be on a level that would make the elevators accessible.

Doors

Sec. 9. Doors shall have a clear opening of no less than 32 inches when open and shall be operable by a single effort. The floor on the inside and outside of each doorway shall be level for a distance of 5 feet from the door in the direction the door swings and shall extend one foot beyond each side of the door. Sharp inclines and abrupt changes in level shall be avoided at doorsills. As much as practicable, thresh-holds shall be flush with the floor.

Stairs

Sec. 10. Stairs shall conform to standards of the American Standards Association, Inc., with the following additional considerations: Steps in stairs shall be designed wherever practicable so as not to have abrupt (square) nosing. Stairs shall have handrails 32 inches high as measured from the tread at the face of the riser. Stairs shall have at least one handrail that extends at least 18 inches beyond the top step and beyond the bottom step. Steps should, wherever possible, and in conformation with existing step formulas, have risers that do not exceed 7 inches.

Floors

Sec. 11. Floors shall wherever practicable have a surface that is nonslip. Floors on the same story shall be of a common level throughout or be connected by a ramp in accord with Section 7(a) through the first paragraph of Section 7(b), inclusive.

Toilet rooms

Sec. 12. (a) An appropriate number of toilet rooms, in accordance with the nature and use of a specific building or facility, shall be accessible to, and useable by, the physically handicapped.

- (b) Toilet rooms shall have space to allow traffic of individuals in wheelchairs, in accordance with Section 5.
 - (c) Toilet rooms shall have at least one toilet stall that
 - (1) is 3 feet wide
 - (2) is at least 4 feet 8 inches, preferably 5 feet deep
- (3) has a door (where doors are used) that is 32 inches wide and swings out
- (4) has handrails on each side, 33 inches high and parallel to the floor, $1-\frac{1}{2}$ inches in outside diameter, with $1-\frac{1}{2}$ inches clearance between rail and wall, and fastened securely at ends and center
 - (5) has a water closet with the seat 20 inches from the floor.
- (d) Toilet rooms shall have lavatories with narrow aprons, which when mounted at standard height are usable by individuals in wheel-chairs, or shall have lavatories mounted higher, when particular designs demand, so that they are useable by individuals in wheelchairs.
- (e) Mirrors and shelves shall be provided above lavatories at a height as low as practicable and no higher than 40 inches above the floor, measured from the top of the shelf and the bottom of the mirror.
- (f) Toilet rooms for men shall have an appropriate number of wall-mounted urinals with the opening of the basin 19 inches from the floor, or shall have floor-mounted urinals that are on level with the main floor of the toilet room.
- (g) Toilet rooms shall have an appropriate number of towel racks, towel dispensers, and other dispensers and disposal units mounted no higher than 40 inches from the floor.

Water fountains

- Sec. 13. (a) An appropriate number of water fountains or other water-dispensing means shall be accessible to, and useable by, the physically disabled.
- (b) Water fountains or coolers shall have up-front spouts and controls. Water fountains or coolers shall be hand-operated or hand- and foot-operated.

Public telephones

- Sec. 14. (a) An appropriate number of public telephones shall be made accessible to, and useable by, the physically disabled.
- (b) Such telephones shall be placed so that the dial and the handset can be reached by individuals in wheelchairs.
- (c) An appropriate number of public telephones shall be equipped for those with hearing disabilities and so identified with instructions for use.

Elevators

Sec. 15. Elevators shall be provided and shall be accessible to, and useable by, the physically disabled at all levels normally used by the general public. Elevator control buttons shall have identifying features for the benefit of the blind. Elevators shall allow for traffic by wheelchairs.

Switches and controls

Sec. 16. Switches and controls for light, heat, ventilation, windows, draperies, fire alarms, and all similar controls of frequent or essential use, shall be placed within the reach of individuals in wheelchairs.

Identification for the blind

Sec. 17. Appropriate identification of specific facilities within a building used by the public is essential to the blind. Raised letters or numbers shall be used to identify rooms and offices. Identification shall be placed on the wall, to the right or left of the door, at a height between 4 feet 6 inches and 5 feet 6 inches measured from the floor, and preferably at 5 feet. Doors that are not intended for normal use, and that are dangerous if a blind person were to exit or enter by them, shall be made quickly identifiable to the touch by knurling the door handle or knob.

Warning signals

- Sec. 18. (a) Audible warning signals shall be accompanied by simultaneous visual signals for the benefit of those with hearing disabilities
- (b) Visual signals shall be accompanied by simultaneous audible signals for the benefit of the blind.

Hazards

- Sec. 19. (a) Every effort shall be exercised to obviate hazards to individuals with physical disabilities.
- (b) Access panels or manholes in floors, walks, and walls can be extremely hazardous, particularly when in use, and shall be avoided where possible.
- (c) When manholes or access panels are open and in use, or when an open excavation exists on a site, particularly when it is approximate to normal pedestrian traffic, barricades shall be placed on all open sides, at least 8 feet from the hazard, the warning devices shall be installed in accord with the provisions of Subsection (b) of this section.
- (d) Low-hanging door closers that are within the opening of a doorway when the door is open, or that protrude hazardously into regular corridors, or traffic ways when the door is closed, shall be avoided.
- (e) Low-hanging signs, ceiling lights, and similar objects or signs and fixtures that protrude into regular corridors or traffic ways shall be avoided. A minimum height of 7 feet, measured from the floor, shall be had.
- (f) Lighting on ramps shall be at least equal to that prescribed by the specifications of American Standards Association, Inc. Exit signs shall be in accordance with specifications of American Standards Association, Inc., except as modified by Section 8 of this Act.

Responsibilities for enforcement

Sec. 20. (a) The responsibility for administration and enforcement of this Act shall reside primarily in the State Building Commission, but the State Building Commission shall have the assistance of appropriate state rehabilitation agencies in carrying out its responsibilities under this Act. State agencies involved in extending direct services to disabled or handicapped persons are authorized to enter into interagency contracts with the State Building Commission to provide such additional fundings as might be required to insure that service objectives and responsibilities of such agencies are achieved through the administration of this Act. In enforcing this Act the State Building Commission shall

also receive the assistance of all appropriate elective or appointive public officials. The State Building Commission shall from time to time inform professional organizations and others of this law and its application.

(b) The State Building Commission shall have all necessary powers to require compliance with its rules and regulations and modifications thereof and substitutions therefore, including powers to institute and prosecute proceedings in the District Court to compel such compliance, and shall not be required to pay any entry or filing fee in connection

with the institution of such proceeding.

- (c) The State Building Commission is authorized to promulgate such rules and regulations as might reasonably be required to implement and enforce this Act. The State Building Commission, after consultation with state rehabilitation agencies, is also authorized to waive any of the standards and specifications presently set forth in this Act and to substitute in lieu thereof standards or specifications consistent in effect to such standards or specifications as might be adopted by the American Standards Association, Inc. (or its federally-recognized successor in function) subsequent to the effective date of this Act.
- (d) The respective governing boards of state-supported institutions of higher education are responsible for enforcement of this Act on all properties under their jurisdiction. In all other instances, the responsibility for enforcement of this Act shall be in the State Building Com-

Effective date

Sec. 21. This Act takes effect on January 1, 1970. Sec. 22. Severability clause. If any provision of this Act or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the Act which can be given effect without the invalid provision or application, and to this end the provisions of this Act are declared to be severable.

Sec. 23. Emergency. The importance of this legislation and the crowded condition of the calendars in both Houses create an emergency and an imperative public necessity that the Constitutional Rule requiring bills to be read on three several days in each House be suspended, and this Rule is hereby suspended; and that this Act take effect and be in force from and after its passage, and it is so enacted.

Passed the Senate on April 21, 1969, by a viva voce vote; passed the

House on May 8, 1969, by a non-record vote.

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